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Foreign

Technology

and

Foreign

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Information



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National Technical Information Service
U.S. DEPARTMENT OF COMMERCE

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PRICES CURRENT
February 1986
Subject to change

U.S. Department of Commerce
Malcolm Baldrige
Secretary

National Technical Information Service
Joseph F. Caponio
Director

Foreign technology enhances all NTIS products, services

The National Technical Information Service (NTIS), as the central source for scientific and technical information sponsored by the United States Government, plays a key role in the international exchange of information. NTIS increasingly has become the lead agency within the Federal establishment responsible for participation in bilateral, regional, and worldwide activities involving technology transfer and information. This has come about because of the growing recognition of the importance of technical information in the conduct of U.S. business overseas and in the conduct of U.S. international relations.

In order to respond to this growing responsibility, the NTIS Office of International Affairs provides a mechanism for the acquisition and dissemination of non-U.S. technical report literature. This effort is depicted by the fact that there are some 400,000 research reports based on foreign technology in the NTIS collection.

- Twenty-five percent of the authors represented in the NTIS collection are from non-U.S. organizations.
- Almost 25 percent of all current annual acquisitions are from non-U.S. sources.
- More than 50 nations regularly contribute information items to the NTIS Bibliographic Database.
- NTIS has bilateral agreements with non-U.S. governmental, regional, or private information organizations in 37 countries which stimulate the international exchange of information through local sales services and the acquisition of new information.
- Over 90 agreements have been negotiated with organizations in Western Europe and Japan for the distribution of technical reports through NTIS.
- Approximately 20,000 foreign technical reports are added to the NTIS database every year.

This catalog highlights the foreign programs currently directed by NTIS and lists products and services from foreign sources. Additionally, it is a guide to sources of NTIS information located outside the United States, and it lists people within NTIS who are responsible for its foreign activities.

NTIS has undertaken the lead role in carrying out industrial innovation initiatives relating to the acquisition of foreign technology to help U.S. industry keep abreast of foreign scientific and technical activities and ensure easy access to foreign technical information.

Bilateral agreements have been concluded with several of the world's leading industrial nations. These agreements are resulting in thousands of foreign technical information items entering the NTIS system, all of them abstracted in English. The full texts of the most important foreign language technical reports are translated into English by NTIS.

Organizations which are currently contributing technical information items include Japan Ministry of International Trade and Industry (MITI), organizations of the Japan Science and Technology Agency, laboratories administered by the United Kingdom Department of Industry, the West German Federal Ministry of Research and Technology (BMFT), the French National Center for Scientific Research (CNRS), the Central Organization for Applied Scientific Research in the Netherlands (TNO), the Technical Research Center of Finland (VTT), the South African Council for Scientific and Industrial Research, Directorate General XIII (Scientific and Technical Information) of the Commission of the European Communities, and many others.

Foreign acquisitions are concentrated in the fields of importance to industry, but a wide range of other topics is included as well. Abstracts of all foreign technical reports are published in NTIS' Abstract Newsletters and journals, and the complete texts also are available from NTIS.

In support of these programs, it is NTIS' objective to provide its customers with much of the important foreign technical information available.

Developing nations

Acting for the U.S. Agency for International Development, NTIS has created an international information network with some 35 Cooperating Organizations around the world. This informal network has been functioning since 1971, when the U.S. Agency for International Development (AID) asked NTIS to create a mechanism to help apply the vast collection of scientific and technical reports available from NTIS in a new effort to aid economic development.

The resultant U.S. AID Program set the following tasks:

1. Establish bilateral agreements with indigenous

information organizations capable of providing local access to U.S. scientific and technical information.

2. Arrange training opportunities for network participants to acquaint them with available scientific and technical information systems and information management skills.

3. Provide network participants with technical advisory services that strengthen their own skills and their institutional capabilities.

4. Support local publication of announcement and promotional media, including *Alertec* and the quarterly newsletter for Central America, *Enlace*.

5. Provide fast delivery of information products to participating agencies through use of subsidized airmail.

6. Provide special information materials and equipment compatible with network participants' needs.

7. Develop selected case studies for assessment of program impact.

Network participants are typically national government agencies directly involved with economic development. The organizational unit which works with NTIS on this project is usually an information center or library. Some 35 organizations in developing countries are now actively participating in the program.

Information management skill-building and user-education programs are essential to help local staff in developing a dynamic national information community. Network participants are expected to play an essential role in their country's modernization for years to come. To help them to serve local information needs better, NTIS provides opportunities for special training courses, field visits by consulting professionals, and local workshops covering particular areas of interest.

Twice each year, a group of from 10 to 15 project network agency representatives and other technical information managers from around the world come to NTIS headquarters in Washington, D.C., for a two-week, hands on, intensive workshop on technical information systems. It gives an overview of the technical information community and its techniques worldwide, bringing knowledge up to date, and expanding participants' connections with NTIS and other information centers. Participants see how the National Technical Information Service operates, how to make it work better for themselves and their clients, how to take full advantage of NTIS collections when they return home, and how they can introduce similar systems into their own operations. The workshop also provides a forum through which Cooperating Organization staffs can learn from one another. For an application and further information, address your request to the NTIS Office of International Affairs.

The information network offers a variety of technology options, helping people in the developing countries choose the best alternatives for solving local problems.

To date, vexing problems the world over have been solved by approaching them with the right information. In Ecuador, a sawdust surplus problem was solved by designing a new product to use this waste. In San Salvador, broken glass was recycled in a tile factory. In Korea, a metal product was improved to export-quality. All this was made possible by information provided through the network.

In a 1982 evaluation AID found an 81 percent application rate in the use of NTIS products and services in the countries studied. The report, **An Evaluation of Scientific and Technical Information Distribution and Use in Latin America: The NTIS Program in Five Selected Countries**, (PB83-113860/CAS, price code A04) describes important trends in the scope and degree of information use in less developed countries.

Training tools available

To monitor such successful examples of information transfer, NTIS created the *Case Studies Handbook: An Aid to Evaluate the Utilization of Scientific & Technical Information*. This handbook documents specific case studies but more importantly shows network participants how to develop their own case studies with specific steps outlined and strategies to follow with the information user. Available as PB80-186448/CAS, price code A06.

A manual and a workbook have been specially prepared for training activities. The manual, *How to Use the NTIS Order Processing System*, helps Cooperating Organizations obtain information from NTIS in the quickest and most effective manner possible. Available in Spanish and English on request from the NTIS Office of International Affairs.

The NTIS Cooperating Organization in New Delhi, India, produced a much more detailed, two-volume manual of operations, entitled *A Cooperating Organisation Manual for Use in Developing Countries*. Copies are available from the NTIS Office of International Affairs.

The Workbook for Use at the Information Systems Workshops is a course guide and aid during the workshop and is a reference tool that information managers use on return to their organizations. Many use it at home to train additional staff as well as large users of information in the community.

An important aspect of training relates to the users of information in developing countries as well as the providers. The habit of using information is not yet established in many developing countries. In order to create an awareness of the value of information, its ready availability, and the mission of network members to serve users' information needs, user education seminars are organized for developmental organizations, governments and businesses. Available in English from the NTIS Office of International Affairs.

Appropriate technologies for business, industry

NTIS covers a broad spectrum of technology. At one end are those sophisticated capital-intensive techniques on which the post-industrialized world has come to depend. At the other end is Appropriate Technology.

Since 1977, NTIS has reflected the shift of emphasis within USAID from capital intensive development projects to a renewed attack on problems more directly affecting the lives of the rural and urban poor. Appropriate Technology is the term most frequently used to identify this philosophy.

In NTIS' interpretation of the term, a technology is appropriate when it is compatible with the economic and social conditions of its users. In developing economies, this often means low-cost, light-capital, Intermediate-level, or alternative technologies. Appropriate technologies are often designed to meet the needs of low-income groups and usually have the following characteristics:

- Can be operated and maintained locally
- Are labor intensive
- Use available energy sources
- Make maximum use of local resources and skills
- Mesh with local and cultural values and needs
- Are environmentally sound

NTIS has become a major clearinghouse for the internal exchange of Appropriate Technology information. The information covers agriculture, rural development, management, small business administration, health, construction engineering, energy, and virtually all other categories of technology.

Typical sources of the information, outside of the United States, include such organizations as:

Appropriate Technology Development Assoc., India; Centro Cooperativo Tecnico Industrial, Honduras; COLCIENCIAS, Columbia; Grupo Talpuy, Peru; Indo-Pacific Fisheries Council, Thailand; Intermediate Technology Publications, United Kingdom; International Rice Research Inst., Philippines; Tech-

nology Consultancy Centre, Ghana; and U.N. Industrial Development Organization, Austria.

Selected information is translated into English, Spanish, French, and Arabic to make it more usable to local groups working with the poor.

The monthly newsletter *Alertec* announces newly acquired reports and documents of particular interest to developing economies. Printed in Spanish, English, and French versions, more than 30,000 copies are distributed each month by network participants to interested parties in developing countries.

Network participants serve as guest editors in order to ensure that items are announced which truly reflect the needs of the target audiences (available free on request from the NTIS Office of International Affairs).

The *Bibliography of Appropriate Technology Information for Developing Countries: Selected Abstracts From NTIS Data File (Fourth Edition)* is a periodically updated bibliography which cumulates all materials in the NTIS collection deemed Appropriate Technology. The current issue contains abstracts of more than 3,000 documents plus subject, corporate author, and personal author indexes. (PB83-113852/CAS, \$7.50) An updated volume is scheduled for publication in 1985.

In order for network participants to utilize all possible sources of Appropriate Technology, NTIS compiled and published *A Global Listing of Appropriate Technology Organizations and Sources*. This is a comprehensive listing of addresses of worldwide organizations, research institutes, and development groups involved in some aspect of Appropriate Technology. It is useful to those interested in contacting Appropriate Technology organizations in their regions as well as other parts of the world. (PB-296 635/CAS, price code A08).

To further ensure that information be used by persons most directly involved with development activities, a grant has been made by USAID to subsidize the purchase of documents in Latin America and the Caribbean. The subsidy is administered by local Cooperating Organizations and NTIS.

The Titles on these pages are representative of foreign technology or marketing information from various countries. Telephone your specific inquiries to the International Affairs staff, (703) 487-4823, or write.

Foreign research covers a wide variety of technical areas

The titles on this and the following pages represent a selection of reports from industrialized countries (other than the United States) which have generated above average interest from NTIS users. All of the reports are in English. They provide a sampling of the wide variety and high quality of foreign industrial/technical information which is actively sought out and acquired by NTIS. See page 47 to learn how you can keep up to date on other foreign information in your field of interest.

BUSINESS AND ECONOMICS

High Tech in Japan: What are the Business Prospects for the Foreign Entrepreneur?

PB85-119865/CAS NTIS Prices: PC E06/MF E01

Power and Participation in an Information Society

PB85-102812/CAS NTIS Prices: PC E12/MF E12

Doing Business Collaborations in India

PB84-230614/CAS NTIS Prices: PC E13/MF E01

COMMUNICATIONS

Ring Local Area Networks: A Strategy for Choosing the Phase Locked Loop Class for Data Repeaters

PB85-117752/CAS NTIS Prices: PC E04/MF E04

Elastic Buffers for Digital Rings

PB84-236272/CAS NTIS Prices: PC E03/MF E03

Adaptive Algorithms for Estimating Eigenvectors of Correlation Type Matrices

PB84-196294/CAS NTIS Prices: PC E03/MF E01

Multipath Propagation at 11, 18, and 36 GHz Due to Ducting

PB84-149780/CAS NTIS Prices: PC E03/MF E01

Network Reliability—A Brief Introduction

PB84-109792/CAS NTIS Prices: PC E02/MF E03

COMPUTER APPLICATIONS

Computer Methods of Signature Verification

PB85-117463/CAS NTIS Prices: PC E03/MF E03

Non-Grammatical Language Processing

PB84-246198/CAS NTIS Prices: PC E03/MF E01

Computers in Personnel: Towards the Personnel Office of the Future

PB84-235613/CAS NTIS Prices: PC E10/MF E10

Database Packages for Microcomputers Reviewed: Computers in Manpower Management

PB84-233949/CAS NTIS Prices: PC E04/MF E04

Large Dictionary, On-Line Recognition of Spoken Words

PB84-214246/CAS NTIS Prices: PC E03/MF E01

Computer Aided Fault Tree Synthesis

PB84-211689/CAS NTIS Prices: PC E04/MF E04

Decision Support Systems (DSS): A Survey

PB84-184456/CAS NTIS Prices: PC E04/MF E01

Profile of Pattern Analysis

PB84-139773/CAS NTIS Prices: PC E03/MF E03

Computers and Privacy

PB84-121920/CAS NTIS Prices: PC E04/MF E04

COMPUTER SOFTWARE

Efficient Sorting Routines in FORTRAN 77

PB85-139491/CAS NTIS Prices: PC E03/MF E03

ORBIT—An Object-Oriented Extension of LISP

PB85-132090/CAS NTIS Prices: PC E05/MF E01

Proposal for Standard Basic Functions in Ada

PB85-118701/CAS NTIS Prices: PC E03/MF E03

Formal Specification and Graphics Software

PB85-117075/CAS NTIS Prices: PC E03/MF E03

Incremental Programming Support Environment

PB85-115996/CAS NTIS Prices: PC E04/MF E01

Programming Language PL/SEQ for Digital Signal Processing Systems

PB85-107480/CAS NTIS Prices: PC E04/MF E01

Real-Time Languages for Process Control

PB84-234319/CAS NTIS Prices: PC E06/MF E06

Practical Fault Tolerant Software for Asynchronous Systems

PB84-205970/CAS NTIS Prices: PC E03/MF E03

LispKit Manual. Volume 1

PB84-204874/CAS NTIS Prices: PC E07/MF E07

Converting to Ada Packages

PB84-203892/CAS NTIS Prices: PC E03/MF E03

Guidelines for the Design of Large Modular Scientific Libraries in Ada

PB84-203868/CAS NTIS Prices: PC E08/MF E08

Tutorial Material on the Real Data Types in Ada

PB84-203884/CAS NTIS Prices: PC E06/MF E06

Programs for Handling RC-Coded Images

PB84-158260/CAS NTIS Prices: PC E04/MF E01

COMPUTER SYSTEMS & HARDWARE

Interfacing UNIX to Data Communications Networks

PB84-205996/CAS NTIS Prices: PC E04/MF E04

Personal Computers in Japan: The Most Up-to-Date Information on Japanese Computer Industries

PB84-176510/CAS NTIS Prices: PC \$25/MF \$25

Annotated Bibliography of Recent Publications on Data Security and Cryptography (6th)

PB84-169168/CAS NTIS Prices: PC E04/MF E04

Newcastle Connection or UNIXes of the World Unite

PB84-160571/CAS NTIS Prices: PC E03/MF E03

Networking Standards: A Comparison

PB84-144385/CAS NTIS Prices: PC E04/MF E04

Distributed Secure System

PB84-141126/CAS NTIS Prices: PC E04/MF E04

CONSTRUCTION

Deformation of Ground Near Tunnels and Trenches

PB85-118743/CAS NTIS Prices: PC E05/MF E05

Behaviour of Buried Flexible Cylinders Under the Influence of Nonuniform Hoop Compression

PB85-116523/CAS NTIS Prices: PC A03/MF A01

Simplified Theory for the Behavior of Buried Flexible Cylinders Under the Influence of Uniform Hoop Compression

PB85-116531/CAS NTIS Prices: PC A03/MF A01

Concrete in Underground Works

PB84-233923/CAS NTIS Prices: PC E04/MF E04

Settlement of Structures on Clay Soils

PB84-204726/CAS NTIS Prices: PC \$27/MF \$27

Site Investigation Manual

PB84-203488/CAS NTIS Prices: PC \$27/MF \$27

High Performance Roofing Systems (Conference, 1 March 1984)

PB84-178243/CAS NTIS Prices: PC E05/MF E05

Development and Use of Composite Fibrous Materials and Structures: A Construction Survey

PB84-170513/CAS NTIS Prices: PC E04/MF E01

Use of Waste Materials from Coal Combustion in Road Construction

PB84-172006/CAS NTIS Prices: PC E14/MF E14

Behaviour of Foundations Supported by Clay Stabilised by Stone Columns

PB84-132141/CAS NTIS Prices: PC E04/MF E01

Rock Dynamics

PB84-127042/CAS NTIS Prices: PC E03/MF E01

Make Your Home a Quiet Refuge

PB84-126291/CAS NTIS Prices: PC E03/MF E01

Waffle Shells for Roof and Floor

PB84-125814/CAS NTIS Prices: PC E05/MF E05

ELECTRONIC COMPONENTS & SYSTEMS

Nordic Semiconductor Meeting (11th) held June 1984

PB84-213180/CAS NTIS Prices: PC E13/MF E01

Helsinki International Summer School on Optoelectronics (held June 1984)

PB84-213198/CAS NTIS Prices: PC E09/MF E01

Modelling the MOSFET Using ASTAP (Advanced Statistical Analysis Program)

PB84-204478/CAS NTIS Prices: PC E04/MF E04

Optically Isolated Amplifier

PB84-184381/CAS NTIS Prices: PC E03/MF E01

Digital Filters and Reverberation Time Measurement

PB84-163104/CAS NTIS Prices: PC E05/MF E05

Computer-Aided Design of Microstrip Hybrid Signal Dividers

PB84-163096/CAS NTIS Prices: PC E04/MF E04

Computer Aided Magnet Design

PB84-145218/CAS NTIS Prices: PC E03/MF E03

Characterization of Microstrip Fixtures, A Broad Band Model for a Microstrip Connector

PB84-130095/CAS NTIS Prices: PC E04/MF E01

Impedance Loaded Circular Wire Loop as Receiving Antenna

PB84-115500/CAS NTIS Prices: PC E05/MF E01

Watch for Price Codes

Most prices in this catalog are indicated by Price Codes. For example: When you read *Gasohol: A Technical Memorandum*. NTIS Price: PC **A04**/MFA**01**, you learn from the Price Code table on page 62 that **A04** is the equivalent of \$11.95, and the **A01** is the equivalent of \$5.95. PC, of course, means paper copy, and MF means microfiche. Price Code Tables may change. Current tables always are free on request from NTIS.

ENVIRONMENTAL CONCERNS

Acid Rain and Forestry

PB85-117638/CAS NTIS Prices: PC E03/MF E03

Sound Propagation Outdoors: A Review of Current Literature Related to Sound Propagation Prediction

PB85-122851/CAS NTIS Prices: PC E04/MF E04

Cost of Control of Sulphur Dioxide, Nitrogen Oxides and Particulates Emissions from Large Combustion Plants in Oil Refineries

PB85-122232/CAS NTIS Prices: PC E04/MF E01

Benzene Emission from Passenger Cars

PB84-170257/CAS NTIS Prices: PC E04/MF E01

Characteristics of Petroleum and its Behaviour at Sea

PB84-132711/CAS NTIS Prices: PC E04/MF E01

FUELS

Applications for the Hydraulic Handling of Coal

PB85-149508/CAS NTIS Prices: PC \$12/MF \$12

Equipment for Hydraulic Handling of Coal

PB85-119360/CAS NTIS Prices: PC \$18/MF \$18

Thermal Depolymerisation of Waste Tires by Heavy Oils: Conversion into Fuels

PB85-100808/CAS NTIS Prices: PC E03/MF E03

Study on the Possibilities for the Replacement of Lead in Gasoline by the Addition of Compounds

PB85-100782/CAS NTIS Prices: PC E06/MF E06

Catalytic Coal Gasification

PB84-233238/CAS NTIS Prices: PC \$18/MF \$18

Separation of Coal Liquifaction Products into Hydrocarbon Compound Groups by Classical Adsorption and High Pressure Liquid Chromatography

PB84-184365/CAS NTIS Prices: PC E04/MF E01

Combustion of Coal Liquid Mixtures

PB84-138981/CAS NTIS Prices: PC \$18/MF \$18

HEALTH & SAFETY

Fire and Explosion Risks Offshore—The Risk Picture

PB85-121937/CAS NTIS Prices: PC E08/MF E08

Indoor Climate

PB85-111458/CAS NTIS Prices: PC E03/MF E01

Burning Characteristics of Potential Ignition Sources of Room Fires

PB85-107720/CAS NTIS Prices: PC E04/MF E01

Indoor Air. Volume 1. Recent Advances in the Health Sciences and Technology. (International Conference held August 1984)

PB85-104180/CAS NTIS Prices: PC E11/MF E01

Indoor Air. Volume 2. Radon, Passive, Smoking, Particulates and Housing Epidemiology (International Conference Held August 1984)

PB85-104198/CAS NTIS Prices: PC E13/MF E01

Indoor Air. Volume 3. Sensory and Hyperreactivity Reactions to Sick Buildings (International Conference Held August 1984)

PB85-104206/CAS NTIS Prices: PC E15/MF E01

Indoor Air. Volume 4. Chemical Characterization and Personal Exposure (International Conference held August 1984)

PB85-104204/CAS NTIS Prices: PC E15/MF E01

Indoor Air. Volume 5. Buildings, Ventilation and Thermal Climate (International Conference held August 1984)

PB85-104222/CAS NTIS Prices: PC E17/MF E01

Safety Aspects of Storage, Handling and Use of Chlorine and Sulphur Dioxide

PB84-167907/CAS NTIS Prices: PC E04/MF E04

Guidelines for Recording Industrial Hygiene Data

PB84-128842/CAS NTIS Prices: PC E04/MF E04

Fire and Plastics in Buildings

PB84-126648/CAS NTIS Prices: PC E03/MF E01

HUMAN FACTORS

Designing Automated Systems—Need Skill Be Lost

PB84-232297/CAS NTIS Prices: PC E03/MF E03

Effects of Microelectronics on Employment

PB84-111996/CAS NTIS Prices: PC E08/MF E08

INDUSTRIAL & MANUFACTURING TECHNOLOGIES

New Markets Through Improved Performance, Reinforced Thermoset Injection (International Conference held October 1984)

PB85-144210/CAS NTIS Prices: PC E06/MF E06

Ion Plating as a Deposition Method for Tribological Coatings

PB84-157338/CAS NTIS Prices: PC E04/MF E01

Guidelines for Preparation of Maintenance Manuals to Accompany New Equipment

PB85-123479/CAS NTIS Prices: PC E03/MF E03

On-Line Debris Monitoring of Condensate

PB85-116952/CAS NTIS Prices: PC E04/MF E04

Bridging the CAD-CAM (Computer Aided Design-Computer Aided Manufacture) Gap for Casting Design—An Opportunity for the Development of Expert Systems

PB84-168178/CAS NTIS Prices: PC E03/MF E03

Mini-Seminar on Quality Assurance

PB84-125640/CAS NTIS Prices: PC E04/MF E01

Improvement of Material Properties of Ni-Base Alloy Investment Castings by Hot Isostatic Processing

PB84-113422/CAS NTIS Prices: PC E03/MF E01

INFORMATION SCIENCE**Proteus Distributed Database System**

PB84-234350/CAS NTIS Prices: PC E03/MF E03

Evaluation of the End-User Feedback Concerning the Results of On-Line Retrieval

PB84-231125/CAS NTIS Prices: PC E03/MF E03

Non-Use of Library-Information Resources at the Workplace: A Comparative Survey of Users and Non-Users of Onsite Industrial Commercial Services

PB84-203769/CAS NTIS Prices: PC E08/MF E08

MARINE ENGINEERING**Parameterizing Extreme Still Water Levels and Waves in Design Level Studies**

PB85-118586/CAS NTIS Prices: PC E06/MF E06

Study on Motions of High Speed Planing Boats with Controllable Flaps in Regular Waves

PB84-216761/CAS NTIS Prices: PC E04/MF E01

Calculation of Sailing Yacht Resistance

PB84-184266/CAS NTIS Prices: PC E04/MF E01

Local Scour and Scouring Protection of Drilling Platforms in the Arctic Sea Environment

PB84-157262/CAS NTIS Prices: PC E05/MF E01

Estimating the Flexibility of Offshore Pile Groups

PB84-116938/CAS NTIS Prices: PC E04/MF E01

MATERIALS**Radiation Processing for Plastics and Rubber 2 (International Conference Held March 1984)**

PB85-144194/CAS NTIS Prices: PC E11/MF E11

**Inventory of On-Going High Temperature Materials
Research Activities in Europe, Section 3: Ceramics**

PB85-133544/CAS NTIS Prices: PC E05/MF E05

Special Concrete for Under Water Concreting

PB85-121887/CAS NTIS Prices: PC E04/MF E04

International Adhesion Conference (Held September 1984)

PB85-116721/CAS NTIS Prices: PC E11/MF E11

Special Steels and Systems for Corrosion Prevention in Reinforced Concrete

PB84-233915/CAS NTIS Prices: PC E06/MF E06

Fibre Reinforced Composites '84 (International Conference Held April 1984)

PB84-236355/CAS NTIS Prices: PC E16/MF E16

Research on the Applications of and Material Resources for Fine Ceramics

PB84-220045/CAS NTIS Prices: PC E07/MF E01

Survey of the Technological Requirements for High Temperature Materials R and D. Section 2: Composites

PB84-215136/CAS NTIS Prices: PC E03/MF E03

Fatigue Crack Growth and Fracture Resistance of Steels in High-Pressure Hydrogen Environments

PB84-213230/CAS NTIS Prices: PC E04/MF E04

Development of a Ni-Base Heat Resistant Alloy (TOMILLOY) for Gas Turbine Combustor

PB84-170265/CAS NTIS Prices: PC E03/MF E01

Fatigue Damage: Mechanics of Carbon-Fibre Reinforced Laminates

PB84-170133/CAS NTIS Prices: PC E05/MF E05

Fatigue in Polymers (International Conference Held June 1983)

PB84-142199/CAS NTIS Prices: PC E08/MF E08

PRINTING

Development for the Measurement of Ink Film Thickness and Dampening Water Content

PB85-109973/CAS NTIS Prices: PC E03/MF E01

Study on Evaluation of Print Quality

PB84-132026/CAS NTIS Prices: PC E03/MF E01

SANITARY ENGINEERING

Pond Systems for the Purification and Disposal of Domestic Wastewater from Small Communities: Use, Design, Operation and Maintenance

PB85-114528/CAS NTIS Prices: PC E04/MF E01

How to Design Sewage Sludge Pumping System

PB84-201755/CAS NTIS Prices: PC E08/MF E08

Polyelectrolyte Users' Manual

PB84-201748/CAS NTIS Prices: PC E07/MF E07

Quantification of Sewage Odours

PB84-116169/CAS NTIS Prices: PC E04/MF E01

TRANSPORTATION

Comparison of Various Adaptive Control Techniques Applied to (Ship) Autopilot Design

PB84-245166/CAS NTIS Prices: PC E04/MF E01

Meaning of Car Availability in Mode Choice Decisions

PB84-234772/CAS NTIS Prices: PC E03/MF E01

Deregulation of Air Transport: A Perspective on the Experience in the United States

PB84-230630/CAS NTIS Prices: PC E04/MF E04

Opportunities for Automobile Fuel Economy Arising from New Technology and Design

PB84-205681/CAS NTIS Prices: PC E04/MF E04

Technical and Economic Aspects of Arctic Marine Transportation: A State of the Art Review

PB84-169234/CAS NTIS Prices: PC E03/MF E01

About the dates of NTIS reports

Sometimes NTIS technical reports bear dates seemingly not current. That is because the originating agencies occasionally delay public availability pending their testing and development of the technology. Regardless of the completion dates of the reports, their first public availability is usually when they are announced by NTIS.

Japanese R&D covered in four report series

Research and Development in Japan Awarded the Okochi Memorial Prize

Here is a window on the industrial R&D work that the Japanese themselves consider most important. Each year the Okochi Memorial Foundation awards prizes to Japanese scientists, engineers, and industrial companies whose R&D in advanced technology has been particularly distinguished by their originality and contribution to society. The recipients prepare a detailed semitechnical description of their prize-winning technology. The descriptions have been produced into a series of readable, well illustrated books which are available from NTIS.

The 1984 edition, for example, contains descriptions of the following innovative technologies: Continuous casting hot rolling mill; production process for methyl methacrylate; software production and maintenance system; carbohydrate-containing bioactive molecules; low-cost dot-matrix printers; color phosphor screen production for CRT's; optical disk memory system; circuit-board mounting system; production of large automotive panels; gate array development and application; high-fructose separation technology; flexible manufacturing system for control panels; amino acid production via genetic recombination.

The order numbers and prices of the volumes in this series are listed below. (No English language version was published for 1971.) Purchasers will be automatically notified when subsequent volumes become available.

Year	Order No.	Price
1984	PB85-138501/CAS	\$ 20.00
1983	PB84-154087/CAS	\$ 20.00
1982	PB83-156042/CAS	\$ 18.00
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- **NTIS Bibliographic Database.** Bibliographic citations and English-language abstracts for all foreign reports are included in this computer-based system. The Database may be leased from NTIS, or it may be searched via one of the following commercial on-line vendors:

Bibliographic Retrieval Services, Inc.
Dialog Information Services
Mead Data Central
SDC Search Services

To find documents when searching the Database, link your subject term(s) with 1) the term FOREIGN TECHNOLOGY, or 2) one or more specific country names. See page 63 for more information on the NTIS Bibliographic Data Base.

- **Abstract Newsletters.** This weekly series is issued in 27 different subject fields. The Foreign Technology version contains abstracts of newly acquired foreign technical reports in areas of high potential interest to industry. See page 51 for additional details. Each of the other subject fields, listed on page 47, contains abstracts of foreign reports which fall within the subject scope of that topic.
- **Government Report Announcements & Index.** Bibliographic citations, abstracts and indexes of all reports entering the NTIS collection are included in this biweekly publication (see page 50). Listings of foreign reports are integrated with those of domestic reports.
- **Published Searches.** Abstracts are provided of reports falling into rather narrowly defined, but high interest, subject areas. Foreign reports are included when appropriate.

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FOR MORE INFORMATION

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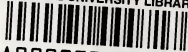
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